



## *Stormwater Needs Assessment Project*

### **Stormwater Management Program Fairfax County Virginia Recommended Program Elements for Year One (FY 2006)**

**Mission:** The mission for the Stormwater Management Program is to develop and maintain comprehensive watershed and infrastructure management services to protect property, to promote health and safety, to enhance the quality of life, and to preserve and improve the environment for the benefit of the public.

To accomplish this mission, the Stormwater Management Program involves the design, construction, operation, maintenance and inspection of the storm drainage infrastructure. It includes performance of environmental assessments through coordinated stormwater and maintenance programs in compliance with all governmental regulations utilizing innovative techniques, customer feedback and program review. These services are carried out by County staff that is committed to service responsive and sensitive to the needs of the residents, customers and public partners.

Over the 2004 calendar year, the Maintenance and Stormwater Management Division and the Stormwater Planning Division assessed current objectives, resources and community expectations to identify a five-year strategy for expanding the services to address the goals and objectives identified within the Strategic Plan for Stormwater Management. These objectives are directly linked to the County's Strategic Plan and the Board of Supervisors priorities.

The following objectives have been established for FY 2006 and are the basis of the expanded level of service for the overall stormwater program.



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### **Stormwater Program Management - Leadership**

**I.A. Management Services - Program Leadership:** Regardless of the final decision of the Board of Supervisors regarding the appropriate funding approach to support the services in the long-term, it is recommended that the leadership of the comprehensive services provided by the County be under the direction of a Program Manager, responsible to the Public Works and Environmental Services Director. The resource requirements for the creation of this role are provided below as well as additional staff recommendations based on whether a user-fee is established. A new contract management position is also recommended, to support the increase in out-sourced services identified under other initiatives for 2006. Effectively managing the contracting/financial process will relieve the burden from operational staff that can be more efficient in carrying out their technical roles to meet all objectives.

Utilization of out-sourcing is a key component in effective delivery of services to the community. This role can be provided by a County staff position, by a contracted employee or by privatizing program management.

After Year One implementation, cost of utility administration (without the indirect cost allocation) is 4.1% percent of anticipated operating revenues. With the indirect cost allocation, a contribution made to the General Fund for services, the cost of utility administration is 9% and reduces over time as the program grows.

### **I. B. Management Services – Stormwater Utility Implementation**

Implementation of the stormwater utility fee requires the County to have the operational ability to send out and collect a bill from owners of all properties included in the rate base. The data to support the amount of imperviousness on the property is insufficient. The County has not updated its GIS-based coverage of planimetric data that is important in allocation of cost on an equitable basis. Planimetric data provides the legal basis for the fee due for any individual property and provides the basis for assigning single family residential properties into a bill-rate category.

In concert with the challenges of the lack of data for equitable allocation of cost, the billing cycle for the Department of Tax Administration, the recommended billing agent for the utility, creates additional challenges. After extensive discussions with the staff of DTA, it is recommended that the target date for the first billing cycle be June 2006, for revenues to support FY 2007. It is recommended that FY 2006 costs for program expansion and utility implementation come from General Fund revenues. These revenues can be returned to the General Fund, through the rate structure, treating the FY 2006 expenditures as a “loan” from the General Fund. The County can create the Enterprise Fund for Stormwater in the FY 2006 budget, using GF transfers to cover the expenditures on an actual basis and could have a repayment to the General Fund of the cost of utility implementation once the revenues of the utility are in place, if desired.

Implementation costs for the utility include the following expenditures:

- ◆ Creation of the updated planimetric data for imperviousness (projected at 35370 labor hours).



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- ◆ Creation of the Master Account File based on new impervious data layer.
- ◆ Integration costs for DTA to add the bill for stormwater (system programming; data integration tests).
- ◆ Public education initiative.
- ◆ Temporary customer service support for initial billing cycle, including training and logistical support (i.e., telephones, training materials, office setups).

It is anticipated that the utility will generate approximately \$34,000,000 in FY 2007. Implementation costs (\$2,936,790) are 8.6% of the first year's revenue. **This resource expenditure is recovered in 5.13 days in the first billing cycle for FY 2007.**

### **Watershed Project Implementation**

**II. Capital Construction Program:** Initiate new stormwater system improvements through design, easement/ROW acquisition and construction contract issuance for projects based on the completion of watershed plans for Little Hunting Creek, Popes Head Creek and other on-going initiatives.

### **Accelerated Watershed Planning**

**III. Accelerated Watershed Planning:** Accelerate watershed planning process, initiating new studies through planning contracts in the amount of \$2.8 million in 2006, in addition to the current funding request of \$1.5 million. In FY 2007 the remaining planning projects would be initiated to ensure completion of all Plans by June 2008.

### **Public Education and Outreach**

**IV. Public Education and Outreach Program:** Educate, continuously, the general public, business owners and stormwater management facility/BMP owners on stormwater management issues; their roles and responsibilities, the County's role and responsibility, with specific emphasis on facilities maintenance, pollution prevention and key MS4 permit, funding production of materials at \$300,000 in FY 2006.

### **System Assessment and Private Facilities Technical Assistance**

**V. Maintenance Assessment Program:** Establish a maintenance assessment program for conveyance and stormwater management facilities (publicly owned only), completing the GIS layer for system inventory and creating a database to be utilized in the infrastructure rehabilitation program. Total estimated project value is \$3 million to be completed over a five year period, with the FY 2006 funding of \$600,000.

**VI. Private Stormwater Facility Technical Assistance Program:** Enhance maintenance services for privately owned stormwater management facilities and best management practices by providing technical assistance, engineering consultation and facility assessment, using contracted services, initially funded at \$200,000 annually.



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### **Conveyance System Rehabilitation Program**

**VII. Conveyance System Rehabilitation:** Initiate construction of replacement or repairs to the existing conveyance systems, through design, easement/ROW acquisition and construction contract. Current known backlog is 20 channels, 23 pipe replacements and approximately 200 failed dam projects. The initial investment of \$1,600,000 in Year 2006 will be the first step.

### **Enhanced Maintenance Response for High Priority (High Hazard) Sites**

**VIII. High Priority Maintenance Needs:** Correct safety-related high priority system maintenance problems identified through the assessment of the stormwater management system, utilizing a new in-house maintenance team with an annual cost of \$475,000 in FY 2006.

### **Maintenance Operations – Contracted Services**

**IX. Public Education – Watershed Management:** Fabricate and place signs at public stormwater facilities and at major roadway crossings to raise public awareness in watershed management issues. This is a one time project, at a cost of \$175,000 in FY 2006 for contracted services to complete in one year, with routine inventory and sign maintenance under current role in MSMD.

**X. VPDES Permit Compliance – Industrial and Commercial Facility Inspection:** Ensure industrial and commercial facilities are in compliance with VPDES permit requirements for hazardous materials storage and disposal, through contracted services to assess 40 sites annually with funding in FY 2006 set at \$50,000.

**XI. VPDES Permit Compliance – System Maintenance:** Using existing contractors, expand sweeping program to address parking and travelways located within 110 County-owned properties which will address one MS4 permit requirement, at an increased cost of \$150,000 in FY 2006.

**XII. House-flooding Reduction Program:** Increase investment in A0002 projects by \$100,000 annually to support in-house construction and/or contracted construction to reduce house-flooding incidents.

**XIII. Dam Safety Program:** Evaluate, create project plan and implement necessary improvements for 15 new state-regulated dams under County responsibility, using contracted services of CMD or MSMD annual contractors.

**XIV. Easement Inventory:** Inventory easements and create a GIS database identifying legal rights of access and maintenance agreements, as appropriate, on both public and privately owned stormwater management facilities, using contracted services resulting in an increase in efficiency in project management and implementation of construction projects. This is a one year activity at \$400,000.



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### **Engineering Design and BMP Development**

**XV. LID Tools:** The County will complete its evaluation of Low Impact Development (LID) strategies over the planning period and initiate the first BMP strategies in FY 2006. The PFM will be updated as appropriate and education materials and tools will be developed to provide resources to the development community. An evaluation methodology will be developed to track the implementation and effectiveness of these BMPs.

**XVI. MS4 Permit Renewal:** The County will undertake an evaluation of the current BMPs in the existing MS4 VPDES permit and identify changes, new strategies, and new BMPs for renegotiation of the permit in calendar year 2006.